Initial Statement of Reasons
Radionuclide Drinking Water Standards
Title 22, California Code of Regulations

All suppliers of domestic water to the public are subject to regulations adopted by the U.S. Environmental Protection Agency (EPA) under the Safe Drinking Water Act (42 U.S.C. 300f et seq.) as well as by the California Department of Health Services (Department) under the California Safe Drinking Water Act (Sections 116270-116751, Health and Safety Code [H&S Code]). California has been granted "primacy" for the enforcement of the Federal Act. In order to receive and maintain primacy, states must promulgate regulations that are no less stringent than the federal regulations.

In accordance with federal regulations, California requires public water systems to sample their sources and have the samples analyzed for inorganic and organic substances to determine compliance with drinking water standards, including maximum contaminant levels (MCLs). Primary MCLs are based on health protection, technical feasibility, and costs. Secondary MCLs are based on consumer acceptance, using parameters such as odor, taste, and appearance as measures of acceptability. The water supplier must notify the Department and the public when a primary or secondary MCL has been violated and take appropriate action. The proposed regulations for radionuclide drinking water standards include primary MCLs and associated monitoring requirements.

On December 7, 2000, EPA promulgated revisions to the existing federal requirements for radionuclides in drinking water [Federal Register 65(236), 76708-76753]. The revisions include the adoption of a primary MCL for uranium (California's uranium MCL was adopted in January 1989), a requirement for monitoring radium 228 and minor revisions related to compliance determinations and monitoring frequencies. Since California must adopt federal regulations to maintain primacy for the Drinking Water Program, the proposed regulation package incorporates all the federal revisions, except that California is retaining its 20 pCi/L uranium MCL instead of adopting the federal MCL of 30 ug/L. Also, for consistency with the Department's implementation of other drinking water standards and the fact that many nontransient-noncommunity water systems (schools serving young people) already voluntarily monitor for compliance with radionuclide MCLs, the proposed regulation includes this category of systems.

For the purpose of clarity, the existing Article 5 would be repealed and replaced with the proposed Article 5 containing requirements supported by references to the federal radionuclide rule (Federal Register 65(236), December 7, 2000, pp 76708-76753). Article 12 would be amended with the proposed Section 64447.3 to incorporate the federal Best Available Technologies (BAT) for radionuclides. Section 64415(a), Article 2, would be amended to include the federal analytical method citation, and language required to codify the necessary use of Department-approved methods for analytes regulated by the Department, but not covered by EPA-approved analytical methods.

The net effect of the proposed amendments to the radionuclide requirements would be that:

- Both community and nontransient-noncommunity water systems would be required to monitor for and comply with radionuclide MCLs;
- Community water systems would be required to monitor for radium-228;
- Ongoing monitoring frequencies would be reduced for alpha particle activity, radium, and uranium, as a function of levels detected;

- Monitoring for beta/photon emitters, strontium 90 and tritium would be required only for systems designated by the Department as vulnerable or identified as contaminated, whereas currently, all surface water systems of a certain size are required to monitor; and
- For systems monitoring quarterly for beta/photon emitters, compliance would be determined on the basis of a running quarterly average.

Adoption of these requirements would satisfy the mandate in section 116350, H&S Code, and federal primacy requirements related to the adoption of regulations at least as stringent as the federal.

The following table provides the federal regulation (Federal Register 65(236), December 7, 2000, pp 76708-76753) citations for each proposed requirement and explains any differences between the state and federal regulations.

State	***Federal (40 CFR)***	***Comment***
64415(a)	**141.25**(a)	
64442		
(a)	**141.26**(c), (a)(1), **141.66**(b), (c), (e), (f), **141.25**(c)	Department is retaining its 20 pCi/L uranium MCL instead of adopting the less stringent federal MCL, because its policy is to not loosen standards unless there is a change in the risk assessment justifying such a change. Department is proposing to extend MCL compliance to the nontransient-noncommunity water systems for consistency with other primary MCL compliance requirements (inorganic and organic chemicals) and to protect the health of those served by such systems, in particular the children served by schools that fall in this system category.
(b)(1)	**141.26**(a)(1)(i), (c)	
(b)(2)	(c)(2)	
(b)(3)	(a)(1), (2)	Although the Department is proposing to extend MCL compliance to the nontransient-noncommunity water systems, it will not require these systems to participate in the expensive federal radium-228 data collection effort.
(b)(3)(A)	(a)(2)(ii)	
(b)(3)(B)	(a)(2)(iii)	
(c)	(a)(1)(ii))	
(d)	(a)(3)	
(e)	(a)(4)	
(f)	(a)(5)	Technical terminology (from federal rule) will be readily understood by laboratories using the required analytical methodology.
(h)	(a)(2)(iv), (3)(iv)	
(i)(1-5)	(c)(3)	
(i)(6)	-	Department is proposing this requirement to ensure that the compliance monitoring data results submitted are provided by laboratories able to meet the federal detection limit requirements. This will improve the quality of the data

		submitted for compliance. The technical terminology will be readily understood by laboratories using the required analytical methodology.
64443		
(a)	**141.55**(f), **141.66**(d)(1)	The Department is proposing to adopt the detection levels for reporting purposes (DLRs) that have been historically used for these radionuclides in the Drinking Water Program compliance monitoring data base. Department experience has demonstrated the value of reporting limits established by regulations; these reporting limits standardize the meaning of "detection" and help improve the quality of the data incorporated into the data base and used for determining compliance. Department is proposing to extend MCL compliance to the nontransient-noncommunity water systems for consistency with other primary MCL compliance requirements (inorganic and organic chemicals) and to protect the health of those served by such systems, in particular the children served by schools that fall in this system category.
(b)	**141.26**(b)(1)	
(c)	(b)(2)	
(d)	(b)(5)	The technical terminology (from federal rule) in (d)(2) will be readily understood by laboratories required to do the calculations.
(e)	(b)(4)	
(f)	(b)(1)(ii), (2)(v)	
(g)	**141.26**(c)(3)	
(g)(1)(E)	-	Department is proposing this requirement to ensure that the compliance monitoring data results submitted are provided by laboratories able to meet the federal detection limit requirements. This will improve the quality of the data submitted for compliance.
(g)(2)	(b)(6)	
64447.3	**141.66**(g)	

Note that the Department finds that adoption of the subject regulations constitutes action by a regulatory agency, which action is expressly authorized by state statute for protection of the environment and does not involve the relaxation of any standard for protection of the environment; and is therefore categorically exempt from compliance with the California Environmental Quality Act (CEQA) as a Class 8 exemption pursuant to CEQA Guidelines, 14 CCR 15308. The Department further finds that the adoption of the subject regulations does not fall within any exception to categorically exempt projects described in Public Resources Code 21084.